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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER MEYERS, JAMES A	
			ART UNIT 2622	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/511,609	Applicant(s) ARIDOME ET AL.	
	Examiner James A. Meyers	Art Unit 2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/4/2004, 11/16/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the initial filing of November 4, 2004. Claims 1-39 are pending and have been considered below.

Drawings

1. Figures 9A and 9B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 28-31 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The Office treats any claim referring to a previous claim as dependent on that previous claim. Claims 28-31 are dependent on Claim 19, which claims a recording medium, but do not add any

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features to the structure of the recording medium, and therefore fail to further limit the subject matter of the claim. **Claims 28-31 will be examined as independent claims.**

Examiner's Note: The Examiner has noticed that Applicant repeatedly uses the word "for" in the preamble of numerous claims, followed by a description of features or steps. The Examiner recommends this be changed to the standard claim language of "consisting" or "comprising", clarifying that the features or steps are part of the invention, not merely intended use.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 19 is directed towards a recording medium, however the Examiner notes that all features of Claims 19-27 are the intended use of the recording medium. No structure is disclosed for the recording medium itself. Therefore, the recording medium is not a physical article or object and as such is not a machine or article of manufacture. The recording medium is not a combination of substances and therefore not a composition of matter. The recording medium is not a series of steps or acts and therefore not a process. Thus, the recording medium as claimed does not fall within any of the four categories of invention. Therefore, Claims 19-27 are not statutory.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Tahara et al. (WO00/46989). Because the document is in Japanese, the Examiner is also making of record Tahara et al. (US 6,671,323), which is the English translation of the original Japanese document. All citations will refer to locations in the English '323 document for ease of prosecution.

Claim 28: Tahara discloses a reproduction method comprising:

(a) decompressing and outputting data of a decoding/reproduction unit by using management information (column 4, lines 6-11; column 2, lines 12-18; figure 31); and

(b) reproducing and outputting additional information synchronously with corresponding decoding/reproduction units of time series information by using management information (column 22, lines 30-34; column 23, line 59 to column 24, line 14).

Claim 29: Tahara discloses a reproduction method comprising:

(a) decompressing and outputting data of a decoding/reproduction unit by using management information (column 4, lines 6-11; column 2, lines 12-18; figure 31); and

(b) reproducing additional information synchronously with corresponding decoding/reproduction units of time series information by using management information, and the additional data is used for controlling data of the decoding/reproduction units (column 22, lines 30-34; column 23, line 59 to column 24, line 14).

Examiner's Note: The Applicant appears to be attempting to invoke 35 U.S.C. 112 6th paragraph in Claims 30 and 31 by using "means-plus-function" language. However, the Examiner notes that the only "means" for performing these cited functions in the specification appears to be computer program modules. While the claims pass the first two tests of the three-prong test used to determine invocation of paragraph 6, since no other specific structural limitations are disclosed in the specification, the claims do not meet the last test of the three-prong test. Therefore, 35 U.S.C. 112 6th paragraph has not been invoked when considering these claims below.

Claim 30: Tahara discloses a reproduction apparatus comprising:

(a) means for reading out compressed time-series information and additional information (figure 31);

(b) means for separating the compressed time-series information and the additional information (figure 31);

(c) means for decompressing the compressed time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14);

(d) means for reproducing and outputting the decompressed time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14); and

(e) means for reproducing and outputting the additional information in synchronization with reproducing and output of the decoding/reproduction unit of the time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14).

Claim 31: Tahara discloses a reproduction apparatus comprising:

(a) means for reading out compressed time-series information and additional information (figure 31);

(b) means for separating the compressed time-series information and the additional information (figure 31);

(c) means for decompressing the compressed time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14);

(d) means for reproducing and outputting the decompressed time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14); and

(e) means for reproducing the additional information in synchronization with reproducing and output of the decoding/reproduction unit of the time-series information

by using management information, and controlling data of one of the decoding/reproduction units on the basis of the additional information (figure 31; column 23, line 59 to column 23, line 14).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-27 and 32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (WO00/46989). As above, all citations will refer to locations in the English '323 document for ease of prosecution.

8. Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Tahara (both '989 and '323) at the time this invention was made, or was subject to a joint research agreement at the time this invention was made. However, Tahara additionally qualifies as prior art under another subsection of 35 U.S.C. 102, and therefore, is not disqualified as prior art under 35 U.S.C. 103(c).

Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application,

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and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.

Examiner's Note: The Applicant appears to be attempting to invoke 35 U.S.C. 112 6th paragraph in Claims 10 and 31 by using "means-plus-function" language. However, the Examiner notes that the only "means" for performing these cited functions in the specification appears to be computer program modules. While the claims pass the first two tests of the three-prong test used to determine invocation of paragraph 6, since no other specific structural limitations are disclosed in the specification, the claims do not meet the last test of the three-prong test. Therefore, 35 U.S.C. 112 6th paragraph has not been invoked when considering these claims below.

Claims 1, 10 and 19: Tahara discloses a method, apparatus and medium comprising:

(a) carrying out data compression on time-series information (column 1, lines 22-37, column 11, lines 52-54, Figure 26);

(b) adding management information to data in each of decoding/reproduction units of the time series information (column 1, lines 22-37, column 11, lines 52-54, Figure 26); and

(c) associating additional information with the management information for corresponding decoding/reproduction units separated by predetermined time intervals (column 7, lines 26-50).

Tahara discloses transmitting the compressed time-series, management and additional information, but does not explicitly disclose storing it on a recording medium. However, one having ordinary skill in the art would recognize that any data being transmitted could also be stored on a recording medium, and would therefore consider it obvious to store the information generated by Tahara. One would have been motivated to store the information so that it would be persistent if a receiver was not present or accessible when the data was generated.

Claims 2, 11 and 20: Tahara discloses a method, apparatus and medium as in Claims 1, 10 and 19 above, and further discloses that:

(a) data of a read/write unit includes a plurality of the decoding/reproduction units of the time-series information (Figures 30A-30D); and

(b) the sequence of pieces of data included in the decoding/reproduction units pertaining to the read/write unit in a time-series direction is changed (Figures 30A-30D).

Claims 3, 12 and 21: Tahara discloses a method, apparatus and medium as in Claims 1, 10 and 19 above, and further discloses that the management information added to data of the decoding/reproduction unit is time management information (Figure 26).

Claims 4, 13 and 22: Tahara discloses a method, apparatus and medium as in Claims 1, 11 and 20 above, and further discloses that additional information for data of the decoding/reproduction unit is transmitted by placing management information at a

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predetermined location of the read/write unit (Figure 26). Tahara does not explicitly disclose storing the additional data. However, one having ordinary skill in the art would recognize that any data being transmitted could also be stored, and would therefore consider it obvious to store the information generated by Tahara. One would have been motivated to store the information so that it would be persistent if a receiver was not present or accessible when the data was generated.

Claims 5, 14 and 23: Tahara discloses a method, apparatus and medium as in Claims 1, 11 and 20 above, and further discloses that:

(a) data of the read/write unit comprises a plurality of packets (column 6, lines 60-63 and figure 27); and

(b) additional information is recorded in data of the read/write unit as a packet including management information (figure 26).

Claims 6, 15 and 24: Tahara discloses a method, apparatus and medium as in Claims 1, 11 and 20 above, and further discloses that:

(a) data of the read/write unit comprises a plurality of packets (column 6, lines 60-63 and figure 27);

(b) a specific packet is selected among packets of time series information (column 20, lines 35-64); and

(c) additional information is transmitted at a location determined as a location relative to the specified packet (column 20, lines 35-64). Tahara does not explicitly

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disclose storing the additional data. However, one having ordinary skill in the art would recognize that any data being transmitted could also be stored, and would therefore consider it obvious to store the information generated by Tahara. One would have been motivated to store the information so that it would be persistent if a receiver was not present or accessible when the data was generated.

Claims 7, 16 and 25: Tahara discloses a method, apparatus and medium as in Claims 1, 11 and 20 above, and further discloses that additional information includes at least information on a time at which data of the time-series information is acquired (column 7, lines 62-64).

Claims 8, 17 and 26: Tahara discloses a method, apparatus and medium as in Claims 1, 11 and 20 above, and further discloses that additional information includes at least information on a condition (location) at which data of the time-series information is acquired (column 7, lines 62-64).

Claims 9, 18 and 27: Tahara discloses a method, apparatus and medium as in Claims 1, 11 and 20 above, and further discloses that:

- (a) the time-series information is video information (column 7, lines 4-6);
- (b) data of the decoding/reproduction unit is information of a frame unit (figures 30A-30D); and

(c) the data compression uses a correlation (predictive coding) with data of the decoding/reproduction unit (column 1, lines 22-37).

Claim 32: Tahara discloses an apparatus comprising:

(a) carrying out data compression on video information (column 1, lines 22-37, column 11, lines 52-54, Figure 26);

(b) adding management information to data in each of decoding/reproduction units of the video information (column 1, lines 22-37, column 11, lines 52-54, Figure 26);
and

(c) associating additional information with the management information for corresponding decoding/reproduction units separated by predetermined time intervals (column 7, lines 26-50).

Tahara discloses transmitting the compressed video, management and additional information, but does not explicitly disclose storing it on a recording medium. However, one having ordinary skill in the art would recognize that any data being transmitted could also be stored on a recording medium, and would therefore consider it obvious to store the information generated by Tahara. One would have been motivated to store the information so that it would be persistent if a receiver was not present or accessible when the data was generated.

Tahara does also not explicitly disclose that the apparatus is for image pickup, and that the apparatus also comprises an image pick up device and an optical system for forming an object image on the image pickup device. However, Tahara discloses

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that MPEG (of which Tahara discloses an encoder and decoder; column 3, line 59-65) "is becoming the de facto standard especially for video data generated by video cameras or the like" (column 1, lines 17-19). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention that the apparatus of Tahara could include the video capturing portion of the video camera (ie the image pickup device and the optical system) as well as the video signal encoding device. One would have been motivated to add such features to the apparatus of Tahara to eliminate the requirement to transfer the raw image data from the camera to a separate encoder, instead having the two parts reside in the same apparatus.

Claim 33: Tahara discloses an apparatus as in Claim 32 above, and further discloses that:

(a) data of a read/write unit includes a plurality of the decoding/reproduction units of the video information (Figures 30A-30D); and

(b) the sequence of pieces of data included in the decoding/reproduction units pertaining to the read/write unit in a time-series direction is changed (Figures 30A-30D).

Claim 34: Tahara discloses an apparatus as in Claim 32 above, and further discloses that additional information for data of the decoding/reproduction unit is transmitted by placing management information at a predetermined location of the read/write unit (Figure 26). Tahara does not explicitly disclose storing the additional data. However, one having ordinary skill in the art would recognize that any data being transmitted

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could also be stored, and would therefore consider it obvious to store the information generated by Tahara. One would have been motivated to store the information so that it would be persistent if a receiver was not present or accessible when the data was generated.

Claim 35: Tahara discloses an apparatus as in Claim 32 above, and further discloses that:

(a) data of the read/write unit comprises a plurality of packets (column 6, lines 60-63 and figure 27); and

(b) additional information is recorded in data of the read/write unit as a packet including management information (figure 26).

Claim 36: Tahara discloses an apparatus as in Claim 32 above, and further discloses that:

(a) data of the read/write unit comprises a plurality of packets (column 6, lines 60-63 and figure 27);

(b) a specific packet is selected among packets of time series information (column 20, lines 35-64); and

(c) additional information is transmitted at a location determined as a location relative to the specified packet (column 20, lines 35-64). Tahara does not explicitly disclose storing the additional data. However, one having ordinary skill in the art would recognize that any data being transmitted could also be stored, and would therefore

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consider it obvious to store the information generated by Tahara. One would have been motivated to store the information so that it would be persistent if a receiver was not present or accessible when the data was generated.

Claim 37: Tahara discloses an apparatus as in Claim 32 above, and further discloses that additional information includes at least information on a time at which data of the video information is acquired (column 7, lines 62-64).

Claim 38: Tahara discloses an apparatus as in Claim 32 above, and further discloses that additional information includes at least information on a condition (location) at which data of the time-series information is acquired (column 7, lines 62-64).

Claims 39: Tahara discloses an apparatus as in Claim 32 above, and further discloses that:

(a) data of the decoding/reproduction unit is information of a frame unit (figures 30A-30D); and

(b) the data compression uses a correlation (predictive coding) with data of the decoding/reproduction unit (column 1, lines 22-37).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Meyers whose telephone number is (571)

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270-1690. The examiner can normally be reached on Mon-Fri 7AM-4PM (Alt Fridays Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

5/24/2007
JM



James W. Myhre
Supervisory Patent Examiner